

CCK-BR (4-A5): sc-53522

BACKGROUND

Gastrin is responsible for the stimulation of various digestive functions. In response to gastrin, the stomach mucosa produces and secretes hydrochloric acid, and the pancreas secretes digestive enzymes. Gastrin also stimulates smooth muscle contraction and increases blood circulation and water secretion in the stomach and intestine. Cholecystokinin (CCK) is a neurotransmitter in the brain that is involved in satiety, stress and anxiety. CCK is expressed in the gastrointestinal (GI) system as well as the central nervous system (CNS), which provides further evidence that CCK modulates food consumption. Both CCK and gastrin mediate their effects through two G protein-coupled receptors, CCK-AR and CCK-BR. CCK preferentially binds CCK-AR with high affinity, whereas CCK-BR binds to gastrin and CCK with nearly equal affinities. The cholecystokinin receptors and their ligands are potential therapeutic targets for GI or CNS diseases.

REFERENCES

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3. de Tullio, P., Delarge, J. and Pirotte, B. 2000. Therapeutic and chemical developments of cholecystokinin receptor ligands. *Expert Opin. Investig. Drugs* 9: 129-146.
4. Crespi, F., Corsi, M., Reggiani, A., Ratti, E. and Gaviraghi, G. 2000. Involvement of cholecystokinin within craving for cocaine: role of cholecystokinin receptor ligands. *Expert Opin. Investig. Drugs* 9: 2249-2258.
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CHROMOSOMAL LOCATION

Genetic locus: CCKBR (human) mapping to 11p15.4; Cckbr (mouse) mapping to 7 E3.

SOURCE

CCK-BR (4A5) is a mouse monoclonal antibody raised against recombinant CCK-BR of rat origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

CCK-BR (4A5) is recommended for detection of CCK-BR of mouse, rat and human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for CCK-BR siRNA (h): sc-43671, CCK-BR siRNA (m): sc-44569, CCK-BR shRNA Plasmid (h): sc-43671-SH, CCK-BR shRNA Plasmid (m): sc-44569-SH, CCK-BR shRNA (h) Lentiviral Particles: sc-43671-V and CCK-BR shRNA (m) Lentiviral Particles: sc-44569-V.

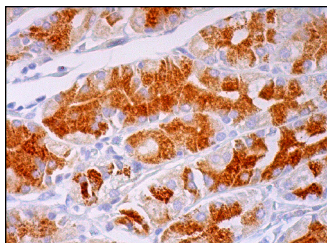
Molecular Weight of CCK-BR: 80 kDa.

Positive Controls: mouse brain extract: sc-2253, SK-N-MC cell lysate: sc-2237 or IMR-32 cell lysate: sc-2409.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



CCK-BR (4A5): sc-53522. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lower stomach tissue showing cytoplasmic staining of glandular cells.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.